

Access DB# 87124

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: David Lukton Examiner #: 71263 Date: 2/21/03
 Art Unit: 1653 Phone Number 30 8-3213 Serial Number: 09-912164
 Mail Box and Bldg/Room Location: Mail Box: 9B01 Exr Am: 9B05 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Title: S-Nitrosothiols as Agents for the Treatment of Circulatory Dysfunctions

Applicants: MOLINER, JOSE REPOLLES; PEREZ-RASILLA, EDUARDO SALAS; COY, FRANCISCO PUBILL; RIUDAVETS, JUAN-ANTONIO CERDA; ROFES, CRISTINA NEGRIE; LLORENTE, LYDIA CABEZA; SISO, ALICIA FERRER; ADROHER, NURIA TRIAS; BANUS, MARCEL.LI CARBO; MORENO, JESUS MURAT; LLAGUNO, PEDRO MICHELENA

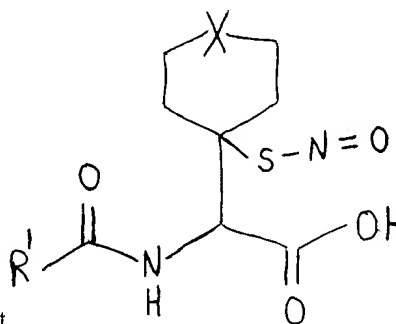
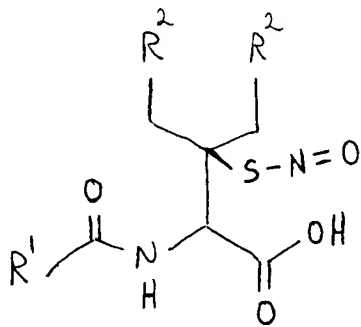
Earliest Priority Date: 1/27/99

Applicants are claiming each of the two genera of compounds below.

R¹ = C₁₋₄ alkyl;

R² = phenyl;

X = -O- or -S- or -NCH₃-



Point of Contact
P. Sheppard

Telephone number: (703) 308-4499

Point of Contact
P. Sheppard

Telephone number: (703) 308-4499

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: _____	NA Sequence (#) _____	STN _____
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Link _____
Date Completed: <u>2/21/03</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) _____

=. fil hcaplus
 FILE 'HCAPLUS' ENTERED AT 16:22:49 ON 21 FEB 2003
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USASETERMS" FOR DETAILS.
 COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1905 - 21 Feb 2003 VOL 135 ISS 9
 FILE LAST UPDATED: 20 Feb 2003 (20030220/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=. d stat qps 110
 L1 STR

29
 0

N 28

S 27

7 9
 0 C 8 0

GP	C	N	C	C	CH
1	2	3	4	5	6

VAR G3=ME/ET/I-PF/N-FR/I-IU/N-BU/T-BU/S-BU

NODE ATTRIBUTES:

NSPEC IS FC AT 8

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L1 23 SEA FILE=REGISTRY SSS FUL L5

L6 STR

26
Cb

C 25

```

      7      8      9      11
      O      G2      O      G1
      10      C      C 12      Cb C C C S N O
      19 20 21 22 23 24

G3 C N C C OH
1 2 3 4 5 6

      15 C 14 C 13
           C

      S N C
      16 17 18

```

VAP G1=O/S 'H
 VAP G2=14 11
 VAP G3=NE/ET (I-PR/N-PR/I-RO/N-BU/T-BU/S-BU
 MOLE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

L10 3 SEA FILE=REGISTRY SUB=L7 SSS FUL L8
 L10 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L8

=
 =

= d ibib abs hitm l10 1

L10 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1000:535107 HCAPLUS

DOCUMENT NUMBER: 133:130471

TITLE: Aromatic and heterocyclic S-nitrosothiols useful as
 agents for the treatment of circulatory dysfunctions
 INVENTOR(S): Pepilles Moliner, Jose; Salas Perez-Rasilla, Eduardo;
 Fabian Coy, Francisco; Cerda Riudavets, Juan Antonio;
 Meggie Rofes, Cristina; Cabeza Llorente, Lydia; Ferrer
 Sisc, Alicia; Trias Adroher, Nuria; Carbo Banus,
 Marcelli; Murat Moreno, Jesus; Michelena Llaguno,
 Pedro

PATENT ASSIGNEE(S): Lacer, S.A., Spain.

SOURCE: PCT Int. Appl., 46 pp.
 CODEN: PIMXD2

DOCUMENT TYPE: Patent

LANGUAGE: Spanish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000044714	A1	20000813	WO 2000-ES19	20000110
W: AE, AL, AM, AT, AU, A, BA, BB, BC, BK, BY, CA, CH, CN, CR, CY,				
CZ, DE, DK, EE, FI, FR, GB, GR, HU, IE, IL, IN, IS,				
JP, KE, KG, KP, KR, KZ, LV, LR, LS, LT, LU, LV, MA, MD,				

MG, MK, MN, MW, MX, NY, NZ, PL, PT, RO, RU, SE, SE, SG, SI, SK,
SL, TL, TM, TR, TT, UA, UG, US, VJ, VN, YU, ZA, ZW, AM, AZ, BY,
EG, KE, MD, RU, TJ, TM

RW: CH, CM, FE, LS, MW, SE, SL, SZ, TL, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LG, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CN, GA, GN, GW, ML, MR, NE, SN, TD, TG

ES 2147102 A1 20000816 ES 1999-150 10090127

ES 2147102 B1 20010816

CA 2353017 AA 20000816 CA 2193-2319027 20000119

BP 210007399 A 20011130 BF 2193-7345 20000119

EP 1157845 A1 20011130 EP 2193-90113 20000119

P: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LG, NL, SE, MC, PT,
SE, SI, SZ, TL, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LG, MC, NL, SE, BF, BJ, CF, CG, CI, CN, GA, GN, GW, ML, MR, NE, SN, TD, TG

GB 2363004 A1 20010816 GB 2001-20181 20000119

DE 10053402 T 20010816 DE 2000-10 83902 20000119

JP 2000033885 T2 20010816 JP 2000-399971 20000119

NO 2001003385 A 20010816 NO 2001-3345 20010706

US 2001018629 A1 20010816 US 2001-311364 20010724

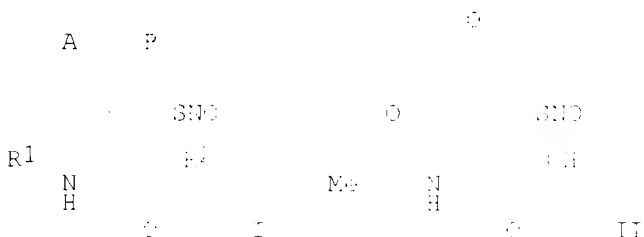
PRIORITY AFFIRM. INFO.:

ES 1999-150 A 10090127

WO 2000-ES19 W 20000119

OTHER SOURCE OF : MARPAT 133:150471

GI



AB The invention relates to novel S-nitrosothiols derived from penicillamine or glutathione, of general formula I (wherein A, E = Ph; or Ar = CH₂-Q-CH₂ where Q = O, S, or N-R₃; R₃ = H or C₁-C₄ alkyl; R₁ = C₁-C₄ aliph. acyl or glutaric acid bonded by gamma-carboxy group; R₂ = OH or glycine radical bonded by peptidic linkage so that R₂ = H when R₁ = aliph. acyl, and R₂ = glycine when R₁ = glutaric acid). The compds. exhibit vasodilating and blood platelet aggregation-inhibiting activity, and are useful in the treatment of circulatory system dysfunctions, esp. cardiovascular dysfunctions. For instance, D-amino-2-(4-mercaptopentahydropyran-4-yl)acetic acid HCl salt was neutralized with NaOH and then N-acetylated with AcCl in MeCN, and the N-acetyl deriv. was S-nitrosylated with HCl and NaNO in aq. MeOH under sonication, to give invention compd. II. In an in vitro assay for vasodilation of norepinephrine-contracted arterial rings, II had an EC₅₀ of 0.375 μM, vs. 1.50 μM for the known comparison compd. S-nitrosoglutathione, and 0.224-1.39 μM for other invention compds. I.

IT **287402-83-9P**, N-Acetyl-2-amino-2-[4- S-nitrosomerapentahydropyran-4-yl]acetic acid **287402-85-1P**, N-Acetyl-2-amino-2-[4-(S-nitrosomerapentahydropyran-4-yl)]acetic acid **287402-86-2P**, N-Acetyl-2-amino-2-phenyl-3-(S-nitrosomerapentahydropyran-4-yl)acetic acid
 RE: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BSL (Biological study); PREP (Preparation); USES (Uses)
 (target compd.; prepn. of arylalkyl-contg. S-nitrosothiols as cardiovascular agents)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>
=>

=> fil caold

FILE 'CAOLD' ENTERED AT 16:22:56 ON 21 FEB 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=>
=>

=> 3 19

L11 0 19

=> fil reg

FILE 'REGISTRY' ENTERED AT 16:24:09 ON 21 FEB 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the SIC/INITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 20 FEB 2003 HIGHEST RN 492991-99-8
DICTIONARY FILE UPDATES: 20 FEB 2003 HIGHEST RN 492991-99-8

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP EPROPERTIES for more information. See STNnote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>
=>

=> d lde can 1 tot

L9 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2003 ACS
R1 287402-86-2 REGISTRY

CN Benzenebutanoic acid, .alpha.-(acetylamino)-.beta.-(nitrosothio)-.beta.-(phenylmethyl)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-Acetyl-2-amino-3-benzyl-3-(S-nitrosomercapto)-4-phenylbutanoic acid
 FS 3D CONCORD
 MF 219 H21 N1 O4 S
 SR CA
 LT STN Files: CA, CAPLUS, USPATEFULL

AMH S NO

HO₂C CH C CH₂ Ph

CH₂ Ph

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:150471

1- ANSWER 1 OF 3 REGISTRY COPYRIGHT 2003 ACS

FN 1-7402-43-1 REGISTRY

CN 4-Piperidineacetic acid, .alpha.-(acetylamino)-1-methyl-4-(nitrosothio)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-Acetyl-2-amino-2-[4-(S-nitrosomercapto)-1-methylpiperidin-4-yl]acetic acid
 FS 3D CONCORD
 MF 210 H17 N3 O4 S
 SR CA
 LT STN Files: CA, CAPLUS, USPATEFULL

NHAc Me
 N

HO₂C CH

CH S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:150471

1- ANSWER 1 OF 3 REGISTRY COPYRIGHT 2003 ACS

FN 1-7402-43-9 REGISTRY

CN 4-Pyran-4-acetic acid, .alpha.-(acetylamino)tetrahydro-4-(nitrosothio)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-Acetyl-2-amino-2-[4-(S-nitrosomercapto)tetrahydropyran-4-yl]acetic acid
 FS 3D CONCORD
 MF 214 H14 N2 O5 S
 SR CA

LC STN Files: CA, CAPLUS, USPATFULL

NHAc

O

H₂C CH

ON S

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:150471

=>

=>